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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,378

07/14/2006

Toshihiro Tai

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EXAMINER

KRUER, KEVIN R

ART UNIT

PAPER NUMBER

1787

MAIL DATE

DELIVERY MODE

10/01/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,378	Applicant(s) TAI ET AL.	
	Examiner KEVIN R. KRUER	Art Unit 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 28, 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-29 is/are pending in the application.
- 4a) Of the above claim(s) 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 28, 2010 has been entered.

Election/Restrictions

2. Claims 22-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al (US 5,326,811) in view of applicant's admissions.

Sano teaches a plated molded article comprising a polyamide resin in amounts of 30-80wt% and a polyphenylene ether resin in amounts of 20-0wt% (abstract). The polyamide is herein understood to read on the claimed "matrix resin that has a water absorption after 24hr in 23C water, according to ISO62, of at least 0.6%" since it is

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compositionally identical to one of applicant's preferred embodiments (see claim 18).

The composition may further comprise a compatibilizer such as fumaric acid (water solubility=0.63g/100mL), maleic hydrazide (water solubility=6000mg/l), maleic acid (water solubility=78g/100ml) and the like (col 5, lines 15+). Each of said compatibilizers is individually understood to read on the claimed component (c) since each comprises hydrophilic functionality and is known to have a water solubility within the claimed range. The molded article is useful as automotive components (col 1, lines 5+).

With respect to claimed surfactant and the emulsifying agent of claim 19, Sano incorporates by reference the teachings of US 3,257,357 with regards to making the polyphenylene ether. In said reference, it is taught that an surfactant (emulsifying agent) may be added to the polyphenylene ether during polymerization (see col 2, lines 54+). This is similar to the manner in which applicant incorporates the emulsifying agent (page 11, first full paragraph in the specification).

With regard to claim 20, the molding of Sano is herein understood to inherently meet the claimed adhesive strength since the plated molded article therein is compositionally and structurally identical to the claimed article.

Sano teaches that fire retardants may be added to the composition but does not teach the fire retardant may comprise a phosphorus compound. However, applicant admits some phosphorous compounds are known in the art to be fire retardants (page 13, first full paragraph of the specification). Thus, it would have been obvious to add a phosphorous compound flame retardant to the composition taught in Sano. The

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motivation for doing so would have been that such compounds are known in the art to be effective fire retardants.

Response to Arguments

Applicant's arguments filed July 28 2010 have been fully considered but they are not persuasive.

Applicant argues the plated resin molded article of the present invention exhibits high adhesive strength between a thermoplastic resin molded article and a plating resin. Applicant argues the articles are provided by treatment under mild conditions without the use of a heavy metal containing acid. Said argument is noted but is not persuasive; the argument is not commensurate in scope with the claimed invention. The claims do not exclude the use of a heavy metal containing acid.

With respect to Sano, applicant argues the reference fails to teach a water soluble substance. Said argument is not persuasive for the reasons of record. Specifically, the compatibilizers read on the claimed water soluble substance (See above). With respect to the surfactant, US 3,257,357 (incorporated by reference) teaches the addition of the claimed surfactant according to the claimed method. Said teaching extends to Sano because Sano incorporates by reference said teaching.

Applicant further argues Sano fails to teach a phosphorus compound. Said argument is noted but is not persuasive since Sano was never relied upon for such a teaching. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant further argues examples 7-11 demonstrate unexpectedly high adhesive strengths. Said argument has been considered but is not persuasive since the showing is not commensurate in scope with the claimed invention. The examples are directed to specific species of components (a-e) in specific relative amounts. Said teachings cannot be extrapolated over the entire breadth of the claims; components c-e are described broadly by their function/characteristics and encompass a wide variety of substance with different functionalities, molecular weights, reactivities, etc. Furthermore, the examples are plated in by a specific method whereas the claimed invention is directed toward any method of plating (electroless, sputtering, vapor deposition, etc).

For the reasons noted above, applicant's arguments are not persuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUEER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/
Primary Examiner, Art Unit 1787